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Strategies in Development of Mental Health Education Materials

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Abstract

With people's participation and involvement as a focus, health education has been rightly declared the first of the eight essential elements of primary health care approach. With the implementation of National Mental Health Programme in different parts of India, it is necessary that mental health education has to prepare and equip itself adequately to play its vital role and meet the challenges of integration of mental health care with primary health care. The present report outlines the various strategies involved in the development of mental health education material for such purposes. The strategies involved in the development of mental health education material has brought to focus the problems in developing material for public education purposes.

Key words -

Mental health education,
Features of mental disorder,
Strategies in development,
Field testing,
Flip chart

Community involvement is a major factor in health development strategies in the context of Health For All by the year 2000 A.D [1]. The National Mental Health Programme [2] envisages integration of mental health care with primary health care. This stresses not only a multisectoral involvement by way of co-operation between health, education and social welfare sectors but also the participation of the community.

Community involvement or participation in general health or mental health in particular, requires a community diagnosis at the first stage. Community diagnosis in terms of public attitudes with particular reference to mentally ill in India-so far indicate that the lay public-including the educated urban groups are largely uninformed about the various aspects of mental health and information provided by them remains uncrystalised [3].

Communication plays an essential role not only in disease identification but also in change of attitudes and promotes changes in health care behaviour. The scientific information provided at a particular point of time would have a long lasting effect on disease control, promotion and prevention. This is true for mental health too, wherein, public mental health education has been stressed as an important criteria in attitudinal changes and health care behaviour of the general

lay public by various researchers [4], [5], [6].

Communicatiing health and medical information effectively, however, is a difficult venture [7]. The same holds good for mental health communication too, wherein, the subjects are complex and technical. When such technical information are portrayed through visuals, it could be misinterpreted and undesirably comprehended by the target audience, if the material is not developed to their standards of visual literacy. Thus field testing of the material developed becomes a necessity in the process of development.

Field testing of the material developed at various stages would help in assessing the comprehension, likes and dislikes, and other perceptions among the target audience. Further, the information learned from these field testing can lead to improvements in the material. Revisions could be effected at an early stage wherein, it is possible and affordable.

The ICMR Centre for Advanced Research on Community Mental Health has outlined the development of appropriate public mental health education, materials as one of its aims [8]. There is an urgent need in making available suitable public education material. The need arises due to the experiment in implementation of National Mental Health Programme, at various centres in different states [9]. As a priority, among the various mental Health education aids, the centre took up the 'Features of Mental Disorders', for the following reasons :

1. To facilitate the health workers trained in mental health care at different centres, towards the identification of mentally ill at the field level.
2. To provide a visual presentation of different features of mental illness for the lay public.
3. To assist the health workers enquiry to be systematic in using the method given in their manual [10].

Existing state of the art

Reviewing the state of the art, it is seen that the Community Mental Health Unit at the National Institute of Mental Health & Neuro Sciences, Bangalore, has been producing mental health education material not as a specific activity until December 1985. The materials developed until this period were produced to meet certain demands at certain specific occasions. So far the unit has produced four handouts in Kannada and English on 'Epilepsy, psychosis, mental retardation, and home care treatment of mentally retarded'. All these media refer to intra communications. Apart from this, mass media production (36 mm film) has been carried out on mental illness and in general.
(1. Towards light;
2. Child and its mental health;
3. NIMHANS)

During mental health camps and exhibitions, individually prepared charts and posters were produced and displayed in accordance with the target audience. Further, material on mental retardation and about NIMHANS were prepared and displayed at a National level exhibition.

Reviewing the progress made up to December 1985, one could come to a conclusion that the materials produced have the following lacunae :

1. The materials developed concentrate on intra and high cost mass media communication.
2. The materials do not have scientific methodological reports on production and field testing.
3. Low cost audio-visual aids to meet the requirements of user agencies have not been developed.
4. The aids for use with such groups by health workers trained under NMHP is not met.

Description of the material

The description of the mental health education material produced is as follows:

Aim :

To provide a visual comprehension of features of mental disorders.

Reference :

Manual of Mental Health for Multi-purpose workers [10] (page 50)

Media :

Audio-visual

Format :

Flip-chart-Demy one-fourth size.

Target group :

Rural, illiterate, Indian population. The maximum number to be addressed with the aid would be 5-10 at a time.

Users :

Health workers, Block health educators, Developmental workers and other multi-sectorial personnel who have received basic mental health training.

Nature of visual material :

Line and shade composition in multi-colours.

Number of cards :

Eleven

Content of the material :

The first ten cards provide a visual description of the signs of various mental disorders, like

Card 1:

Who talk nonsense and act in a strange manner considered abnormal.

Card 2:

Who has become very quiet and does not talk or mix with people.

Card 3:

Who claim to hear voices, see things other cannot hear or see.

Card 4:

Who are very suspicious and claim that some people are trying to harm them

Card 5:

Who have become unusually cheerful, crack jokes and say that they are wealthy, and superior to others when it is really not so.

Card 6:

Who have become very sad lately, and cry without reason.

Card 7:
Who talk about suicide or has made an attempt at suicide

Card 8:
Who get possessed by God or spirit or who is said to be the victim of black magic or evil power.

Card 9 :
Who suffers from fits or loss of consciousness and fall down.

Card 10 :
Who are dull, not mentally grown up like others of their age and slow since birth.

Card 11 :
A collage of all the above said ten cards.

Material and Methods

Stage 1: (Field test 1)

The above described 10 cards were sketched out in Indian ink on demy size ivory art board and was field tested. The objective was to understand how the rural lay public visualise them. The field testing was carried out in Solur and Anekal PHC areas of Bangalore District. Two groups of respondents in Solur PHC area were considered as samples for the first and second field tests. Group 1, consisted of 35 community health guides, and group 2, consisted of 35 resident trainees of Gruhini (household management) programme in a Christian Hospital training centre. The method of field test adopted was the group approach, wherein, the cards were shown to the respondents of group 1 for a minimum of 30 seconds to a maximum of 60 seconds each. After this the respondents were requested to describe the content of the picture in a given response sheet.

Stage 2 : (Field test 2)

Based on the content analysis of the responses on black and white line drawings from group 1, the material was coloured and was presented to group 2. Completion of the second field test brought out the; limitations of the group interview procedure. The limitations were:

1) Those who perceived the visual material faster gave an illustrative account;
2) few others perceived the visual with certain life events or what they experience in day to day life (similar to projective tests) and were able to illustrate a lot on other details rather than the core content of the message;
3) prompting by enthusiastic members in the group could not be curtailed;
4) copying of information from the neighbours occurred in spite of instructions.

Hence for further field testing of the material it was decided to adopt individual in-depth interview method.

Stage 3: (field test 3)

Further revisions of the chart was made based on group 2 responses and was field tested with 20 respondents of the third group in a village in Anekal PHC area. Purposive sampling procedure was

adopted in the sampling selection. An in-depth interview method was adopted during this field test. Among these twenty, only fifteen respondents co-operated to the request and the other five refused to answer.

Stage 4 : (Gate-keepers interview)

Following the above activity, the field tested material along with the responses and the script was presented to the State Health Education Department Personnel and two of the Scientific Advisory Committee members of the ICMR Centre for Advanced Research on Community Mental Health, who are pioneers in health education. All the technical flaws pointed out by them were corrected. The suggestions by these experts were incorporated in the revised material.

Stage 5 : (Animator's role play exercise)

The revised material, following the technical experts scrutiny, along with the script was given to six health workers (3 males and 3 females) in the Solur PHC area and they were asked to demonstrate the aid to the general public in the field area. Before the animators started the exercise, they were trained in the use of the material for about fifteen minutes. This exercise was carried out with the objective of understanding the main idea comprehended by the audience during an animator's exercise. Secondly, to obtain the animator's opinion, regarding the practicability and usage of the material at the field level. Thirdly, to assess the group behaviour during the animator's exercise. The above mentioned objectives were carried out by a mental health professional not involved in the production of the material. This was to avoid the bias of the personnel involved in the production of the material. An indepth interview method using an interview guide-line with a selected range of audience addressed to the main idea communicated, comprehended, likes and dislikes, believability and personal relevance / interest of the audience. The animator's opinion on this exercise was obtained using a specially designed proforma covering the practicability and informativeness of the material. The group behaviour during the animator's exercise was assessed through a non-participant observation method using a structured guideline.

Stage 6 : (User's feed back)

Following the above activities, copies of flip charts were produced in four colours printing with written material at the back of each card. The flip charts were distributed to multi-purpose health workers (193 numbers) and medical officers (69 numbers) trained in mental health care. The opinions of these health personnel were collected in a specially designed proforma attached to the flip chart. Tangible revisions in the visual material as suggested by these health personnel were effected in the final revision.

The results obtained during the first three fields were content analysed. Based on the undesirable responses obtained through the content analysis, revisions were effected in the chart. The results and the description of the revisions made during each stage is described in detail in the following paragraphs. Sketches of first and last format only are inserted to describe the changes made in visual material.

Results and Discussion

The personal profile of three groups of respondents are described below.

The material field test has been carried out with rural population with a proportionate number of males and females. The age of these respondents range from 16 to 36 years and above. By occupation, the respondents were agriculturists, housewives and trainees of gruhini programme.

The mean desired identification rate for the ten cards increased considerably from 2.5 to 3.2 and 7 cards, respectively for tests 1, 2 and 3 testings. Card No.1 depicting 'behaving in a strange manner' showed very low desired responses in the first two fields (6% and 9%) respectively. The picture depicted (Figure 1), elicited the responses mostly for a drunken behaviour of a normal person rather than a mentally ill acting in a strange manner. Hence, in the third field test when the content of the card was changed, 87% were able to identify in a desired manner. Based on the gate keepers interview dull effect for the turbans and the person removing the clothes being too young. It was suggested to portray him as an adult. It was reported by them that the target group comprehended the message that socially unacceptable activity was associated with adolescents rather than others. Hence, the adolescent boy was removed and an adult was portrayed as in the present form (Figure 2).

Card No.2 had an average identification rate from the first to the third field test. The desired identification rate was 66%, 51% and 87% for the three field tests. The undesired responses during the first field test was that there is a person sitting in the centre and he is thinking about his daughter's marriage, whereas his wife who is not bothered about the family matter is happily chatting with the other ladies in the village. During field test 2 the undesired responses hiked up, as the coloured charts (Figure 3) brought in similar stories in a striking manner. The emotions on the face of the person was given prominence during the revision and was field tested. This sketch brought in clear distinction in this regard and the desirable response rate increased. The technical expert's scrutiny brought to light the unnatural way of the lady standing with the pot of water on the right hand side, sarees of the women sweeping the floor and the person with spectacle sitting under the tree looking unnatural for the rural setting. All these comments were taken into consideration and changes were effected in the revision. The user's feedback suggested for reduction in the background overcrowding. It was reported by them that the other details distracted the main idea of communication. Hence, in the final revision (Figure 4) more prominence was given to the person being moody, few of the characters were removed and lesser prominence was given to the persons in the background.

Card No.3 depicting 'seeing and hearing things which others do not see or hear' consistently showed low identification responses throughout the field testing. 91% of the respondents gave an undesirable response during the field test 1. Majority of the responses was that the lady was on her death bed and was seeing 'Yama'(God of death) coming to kill her. Simultaneously she is hearing the sound of the drum beat used during the death procession. Due to this she is apprehensive and has called her daughter to state her last wishes (Figure 5). The coloured revision used during field test 2 had similar responses. Following this the card has revised wherein, the daughter and the bed were removed. Only 20% of the respondents were able to give a desirable response. The other 80% interpreted that the lady is lazy and her husband usually comes home with a stick to beat her. The sound of his walking was correlated for the drum beat. Hearing the sound has made the lady to be panicky. The reason for low desired identification rate could be that this symptom is psychic rather than somatic and are personal experiences of mentally ill persons. Hence, it is difficult for the lay public to have known through some patient's verbal expression. It was necessary for us to communicate this message in single card. Other simplified drawings too proved to be futile. Hence, it was decided to accept the limitations in the regard and to convey the information with script material to be communicated by the animator. The

technical experts also accepted the limitation and agreed on the suggestion made in this regard. The sitting posture and the saree foldings of the lady was commented upon by the experts. The changes were carried out as suggested. The users commented upon drawing a cartoon for this particular card. As series of pictures need to be given for such visual representation it was not possible to make a revision. The card was retained as such in the last format.(Figure 6)

The results obtained for card 4 on 'abnormally suspicious of others' was similar to that of card 3 described in the earlier paragraph. During field test 1, only 9% responded in a desirable manner. The undesired responses were that the person is physically handicapped and is trying to walk with the support of the wall (Figure 7). During field test 2, the desired response increased slightly due to colouring of the charts. When the content of the card was changed during field test 3 the desired response was only 20%. The undesired responses brought to light that the respondents were not viewing the person being killed in the imaginary boundaries to be the same person who is thinking about it. The three dimensions given in the chart brought in interpretations that a villager had come to take loan for agriculture from the moneylender. During which time he overhears the other two moneylenders talking about another person who had not repaid the loam and were plotting how to kill that person. Based on the technical expert's comment a chain with beads in the neck of the person projected and in the imaginary boundaries was incorporated, suspicious identification rate could be attributed to the same psychic phenomena as described for the earlier chart. As there was no particular suggestion from the user's the card was retained as such in the final format (Figure 8).

Card No. 5, sketched in black and white during field test 1, to illustrate a person being 'unusually cheerful and boastful' was desirably recognised only by 34% of the respondents. The undesired responses illustrated that the person portrayed is acting out a particular song sequence in a movie to his family member. In the second field test, the desired identifications rate doubled (69%) as the charts were coloured, wherein the dresses of the patient was coloured strikingly. Though the respondents were able to identify that the person is acting out, the undesired responses revealed that they did so because of the background which was depicted to be a house (Figure 9). In the third field test, the background was depicted as a village. With this the desired identification rate went up to 73%. Analysing the undesired responses it was found that the person depicted to be manic was considered as a mythological story teller enacting a particular scene on a stage. Following the technical expert's suggestion the imaginary boundaries was moved to the right hand corner and was coloured strikingly. The attire of the person was also brightly coloured. Based on the user's feedback the attire of the person was changed with striking colours and lesser prominence was given to the onlookers to avoid unnecessary attraction of the viewers on them (Figure 10).

Card No. 6 related to 'unusually feeling sad' was recognised desirably by only 43% of the respondents during the first field test. The desired response rate improved to 60% when it was coloured (Figure 11). The content analysis of the undesired responses showed that most of the respondents had correlated a sorrowful event that had occurred for the girl just then due to which she is crying. For example, it was stated that the girl had nicely dressed and wanted to go for a movie, whereas, her father did not permit her to go for the movie, hence, she is sitting and crying. At this point of time it was noted that young age depression is not common in practice. Based on this the card was designed with a middle age woman in depression. The revised material when field tested, yielded the desired response. The undesired responses when analysed revealed that the lady is crying because she had lost some of her jewels and other valuables which she had kept in the box by the side of her. Following the

scrutiny by technical experts the latch on the box was removed, the saree of the lady was corrected, the room which was looking very plain and neat was modified to be in tune with a rural house. The facial expression of the lady was toned up. Following the user's feedback the figure was blown up and the box was totally removed in the last format (Figure 12).

Card No.7 depicts 'suicidal ideation' in a depressed patient. Though there was a considerable increase in the desirable response between the first and second field tests (34% to 60%) the undesired responses revealed that the comprehension of the respondent did not occur in related manner between the dimensions depicted (Figure 13). The attention of the respondents was attracted towards the second lady in the main frame based on which the respondents drew up stories like, the mother-in-law scolding the daughter-in-law to go and commit suicide. The card was revised totally with a single individual and a replica shown in ideational boundaries. This when field tested with group 3 respondents, showed a higher desirable rate (87%). The scrutiny by technical experts helped in correcting the saree of the lady brightening the hair and the imaginary boundaries. Based on the user's feedback the person depicted was blown up a little more (Figure 14).

Card No. 8 was originally designed to project 'magnifying small things and constant worrying' as symptoms of neurotic depression (Figure 15). This was not perceived by the respondents in conjunction with the objectives the researchers had in their mind. This yielded a very low desired response of 6% in both the black and white sketching (field test 1) and the coloured presentation (field test 2). At this point of time it was noted that the visual was not in line with the symptoms enquiry list as given in the 'Manual of Mental Health for Multi-Purpose Workers' [10]. Hence, the other card was developed depicting 'behaviour attributed to black-magic' wherein, a psychotic patient was being taken to a traditional healer. This card in the third field test showed the highest desirable response rate of 93%. The reason for this could be the reflection of the practice in the community being seen by the respondents in the card. The technical experts suggested to tone down colour for the magician. It was pointed out that depicting Devi statue might hurt the feelings of the Hindus. Hence, a stone being garlanded, instead of Devi was depicted. Following the user's feedback the position of the magician and the patient were interchanged to give more prominence for the patient (Figure 16).

Card No. 9 projected a girl 'suffering from fits'(Figure 17). The desired response rate was poor for the first and second field tests. It was 34% and 37% respectively. Undesired responses revealed the girl portrayed in the picture to be an urbanite. Secondly, the attention was towards the details like the dress, shoes, hair style. Thirdly, the respondents being agriculturists in majority and coming from rural area perceived the background as paddy fields and the road to a canal. Based on this they comprehended that the girl had slipped into the water canal and was drowning. In the third field test the background was depicted as a village. The revised material was desirably identified by 60% of respondents. The undesired responses revealed that the girl is flying due to cyclone or heavy winds. Based on the technical expert's suggestion the attire of the girl was totally changed to depict a rural girl. Following the user's feedback the background which was distracting the audience, was totally changed to a room setting (Figure 18).

The last card developed was to depict 'delayed mental development'. The desired response obtained during the first and second field test was 33%. The rest 67% reported of a father teaching his son how to play marbles (Figure 19). The boy who was distracting the main idea of communication was deleted during field test 3. When the adult with mental retardation features was portrayed to be playing

marbles, it was desirably identified by a majority (87%) of the respondents. The responses were that the person is not playing an activity for his age. The technical experts suggested to add a few more coloured marbles to attract the attention faster. These modifications were effected. Following the user's exercise, the background details such as the hut and the village descriptions were reduced and the main idea of communication was given prominence (Figure 20).

The desired and undesired identification response rate for the three groups of respondents card wise is shown in Table 1. The third field tested material had a mean desired identification rate of 7 per individual for a set of 10 cards. Eighty to Ninety per cent of desired identification rate was obtained for 6 cards (card nos 1, 2, 6, 7, 8, 10), followed by 60-70% for 2 cards (card nos 5 and 9). The desired identification rate is higher compared to the optimum level suggested for flip chart material field testing [11]. The limitations with regard to card nos 3 and 4 has to be accepted in view of the psychic phenomena. This limitation could be circumvented as the material would be used by animators trained in mental health care. The messages could be conveyed by them through the supportive script material presented at the back of each card.

Table 1 - Responses for the cards field tested

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Mean desired identification for field test 1=2.5

Mean desired identification for field test 2=3.2

Mean desired identification for field test 3=7

The script for the visual representation was developed in two formats, viz., prompt and content form. Prompt form was developed to enable the animators to communicate the visual aid to general public while identifying the cases. Content form was provided for use in public health education activities and in training for village leaders and community health guides. The visual material obtained following the gate-keeper's interview was subjected to stage 5 (animator's role play exercise) with the above mentioned script forms.

An indepth interview following each animator's exercise using an interview guideline with a selected range of audience addressed was encouraging in terms of the main idea communicated and comprehended. The respondents liked the material, considered believable and of personal relevance and interest. The animator's opinion on this exercise revealed that it is practical to communicate the mental health information through this aid which is much informative visually. Assessing the group behaviour it was observed that majority of the members were attentive and their participation in discussion on the cards flashed was spontaneous.

The results obtained following stage 6 (user's feedback) when analysed revealed that the overall reaction towards the material by the health personnel was encouraging in terms of the main idea of communication, likes and dislikes, believability and reaction to the messages, educational aspects and feeling towards the material. The practicability in using the aid in the field has been reported to be very useful by 96% of respondents. A majority (83%) have opined that the material is relevant to all people. The script material has been reported to be in tune with the visual material by 74% of respondents. Changes in the visual material was suggested by 21% of the respondents. Tangible revisions were effected in the final format.

Conclusion

The current effort has yielded the visual material to depict various features of mental disorders. The present format has undergone various stages of development procedure with the actual target group. The technical input by health education experts and users feedback have helped in finalising the present format to a considerable extent. Hence, the content of the present format could be used as the nucleus for production of different communication formats like posters, charts, for telecast in close circuit television and television net work, sound and slide programmes. The various strategies involved in the development of mental health education material has brought to focus the problems in developing material for public education purposes.

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